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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,868	10/15/2003	Kenneth Brakeley Welles II	132361	5772

41838 7590 07/11/2007

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EXAMINER	
BEAMER, TEMICA M	

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
07/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/685,868	WELLES ET AL.	
	Examiner	Art Unit	
	Temica M. Beamer	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6, 10-15 and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Slonim et al (Slonim), U.S. Patent No. 5,929,749.

Regarding claims 1, 10 and 12, Slonim discloses a method/apparatus of facilitating communication in an electrical power network having a complex impedance, comprising: modifying said complex impedance; and determining whether said modifying affected a quality of said communication (col. 3, line 61-col. 4, line 22, col. 4, lines 46-60 and col. 5, lines 47-56; figures 1-6).

Regarding claims 2 and 13, Slonim discloses wherein said modifying alters a characteristic of a null in said electrical power network (col. 10, lines 24-48).

Regarding claims 3 and 14, Slonim discloses wherein said communication is conducted in a signal frequency band, and wherein said modifying improves said quality in said signal frequency band (col. 4, lines 5-23).

Regarding claims 4 and 15, Slonim discloses wherein said modifying is performed in response to a determination that said quality is below an acceptable threshold (col. 4, lines 46-60).

Regarding claims 6 and 17, Slonim discloses wherein said method/apparatus is employed by a device selected from the group consisting of a transmitter, a receiver, and a transceiver (figure 5).

Regarding claims 11, 22 and 24, Slonim discloses facilitating communication in an electrical power network having a complex impedance, comprising: transmitting information via said electrical power network; modifying said complex impedance; and retransmitting said information via said electrical power network (col. 3, line 61-col. 4, line 22, col. 4, lines 46-60 and col. 5, lines 47-56; figures 1-6).

Regarding claims 21 and 23, Slonim discloses facilitating communication in an electrical power network having a complex impedance, comprising: a module for determining a quality of communication in said electrical power network; and a module for controlling a circuit to modify said complex impedance if said quality is below an acceptable threshold (col. 3, line 61-col. 4, line 22, col. 4, lines 46-60 and col. 5, lines 47-56; figures 1-6).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 5, 7-9, 16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slonim in view of well-known prior art.

Regarding claims 5 and 16, Slonim discloses the method/apparatus of claims 1 and 12 as described above. Slonim, however, fails to disclose wherein said modifying and said determining are repeated for a plurality of values for said complex impedance, and wherein said method further comprises determining which of said plurality of values yields a best level for said quality.

The examiner contends, however, that such a technique is well-known in the art and the examiner takes official notice as such.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Slonim with such a technique for the purpose achieving an optimal communication.

Regarding claims 7, 9, 18 and 20, Slonim discloses the method/apparatus of claims 1 and 12 as described above. Slonin, however, fails to disclose wherein the method is employed by a transceiver that failed to receive an acknowledgement of a message that said transceiver previously transmitted over said electrical power network

and wherein said quality is gauged by whether said communication is acknowledged by a receiver coupled to said electrical power network.

The examiner contends, however, that such features are well-known in the art and the examiner takes official notice as such. Specifically, it is known in the art that the transmission and reception of an acknowledgment message is widely used in determining if messages or certain signals have been received. The lack of transmission or reception of such a message is sometimes used as an indicator that the system is experiencing a malfunction or problem.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Slonim with the teachings of well-known prior for the purpose maintaining proper system function.

Regarding claims 8 and 19, Slonim discloses the method/apparatus of claims 1 and 12 as described above. Slonim, however, fails to disclose wherein said quality is gauged by a bit error rate of said communication.

The examiner contends, however, that such a feature is well-known in the art and the examiner takes official notice as such.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Slonim with the use of bit error rate detection in order to determine if the communication is of a good quality.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tran, U.S. Patent Pub. No. 2006/0246849, discloses a system and method for regulating antenna electrical length.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temica M. Beamer whose telephone number is (571) 272-7797. The examiner can normally be reached on Monday-Thursday (alternate Fridays) 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Temica M. Beamer
Primary Examiner
Art Unit 2617

tmb

TEMICA BEAMER
PRIMARY EXAMINER